Progress Report

BLUE OUTLIERS AMONG HIGH REDSHIFT QUASARS

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Several sources qualify as "blue outliers" (i.e., quasars whose [OIII] $\lambda\lambda$4959,5007 lines show large systematic blueshifts with respect to rest frame) in a sample of 50 high luminosity Hamburg-ESO quasars. The prevalence of the "blue outliers" – that are suggestive of a fully outflowing narrow line region – appears to be much larger at intermediate z and high luminosity than at low z and at low luminosity. We discuss major findings on what has become a small but intriguing niche field in active galactic nuclei research, and stress the relevance of "blue outliers" and of outflows deduced from the [OIII] $\lambda\lambda$4959,5007 line profile shifts for feedback and host galaxy evolution.

Invited Lecture

APPLICATIONS OF CAUSTIC CROSSING COUNTS TO THE STUDY OF LENSED QUASARS

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The light curves of lensed quasars keep information about the size and structure of quasars accretion disks, specially at high magnification events (HME) related to caustic crossing. However, the width of an HME is also related to the effective transverse velocity of the lens galaxy. We use an estimate of the lens galaxy velocity obtained from the caustic crossing rate in the lensed quasar Q 2237+0305 to infer some properties of its accretion disk from the profile of a typical HME.